WHAT IS CLAIMED IS:

1. A driving method of a semiconductor laser having an active layer region, a phase adjustment region and a distributed Bragg reflector region, comprising the steps of:

calculating an average value of multipulse modulation current modulated between a peak current and a bottom current input to said active layer region;

calculating a difference between the average value of said multipulse modulation current and a bias current input to the active layer region;

applying a first compensation current to said phase adjustment region when said bias current is input to said active layer region, and applying a second compensation current corresponding to said difference to said phase adjustment region when said multipulse modulation current is input to said active layer region.

2. The driving method of the semiconductor laser according to claim 1, wherein said second compensation current is calculated by adding a current corresponding to said difference to said first compensation current.

3. The driving method of the semiconductor laser according to claim 1, wherein a difference between a heat value when said multipulse modulation current is input and a heat value when said bias current is input to said active layer region is calculated from said difference, and

said second compensation current is calculated by adding a current corresponding to the difference between said heat values, to said first compensation current.

4. A driving method of a light source apparatus provided with a

semiconductor laser having an active layer region, a phase adjustment region and a distributed Bragg reflector region, and a second harmonic generation device for generating second harmonic from input light which was emitted from said semiconductor laser, comprising the steps of:

calculating an average value of multipulse modulation currents modulated between a peak current and a bottom current input to said active layer region;

calculating a difference between the average value of said multipulse modulation currents and a bias current input to the active layer region;

applying a first compensation current to said phase adjustment region when said bias current is input to said active layer region, and applying a second compensation current corresponding to said difference to said phase adjustment region when said multipulse modulation current is input to said active layer region.

5. The driving method of the light source apparatus according to claim 4, wherein said second compensation current is calculated by adding a current corresponding to said difference to said first compensation current.

6. The driving method of the light source apparatus according to claim 4, wherein a difference between a heat value when said multipulse modulation current is input and a heat value when said bias current is input, to said active layer region is calculated from said difference, and

said second compensation current is calculated by adding a current corresponding to the difference between said heat values to said first compensation current.

7. A driving apparatus of a semiconductor laser having an active layer

region, a phase adjustment region and a distributed Bragg reflector region, comprising:

an active layer driving means which applies a constant bias current and applies a multipulse modulation current modulated between a peak current and a bottom current, to said active layer region;

a phase adjustment region driving means which applies a first compensation current to said phase adjustment region when said bias current is input to said active layer region, and applies a second compensation current to said phase adjustment region when said multipulse modulation current is input to said active layer region; and

an operation unit which calculates an average value of said multipulse modulation currents input to said active layer region, calculates a difference between said bias current and said average value of the multipulse modulation currents input to said active layer region and calculates said first and second compensation currents applied to said phase adjustment region by said phase adjustment region driving means, based on said difference.

8. A semiconductor laser apparatus comprising:

a semiconductor laser having an active layer region, a phase adjustment region and a distributed Bragg reflector region;

an active layer driving means which applies a constant bias current and applies a multipulse modulation current modulated between a peak current and a bottom current, to said active layer region;

a phase adjustment region driving means which applies a first compensation current to said phase adjustment region when said bias current is input to said active layer region, and applies a second compensation current to

said phase adjustment region when said multipulse modulation current is input to said active layer region; and

an operation unit which calculates an average value of said multipulse modulation currents input to said active layer region, calculates a difference between said bias current and said average value of the multipulse modulation currents input to said active layer region, and calculates said first and second compensation current applied to said phase adjustment region by said phase adjustment region driving means, based on said difference.

9. A light source apparatus comprising:

a semiconductor laser having an active layer region, a phase adjustment region and a distributed Bragg reflector region;

a second harmonic generation device for generating second harmonic from input light which is output from said semiconductor laser;

an active layer driving means which applies a constant bias current and applies a multipulse modulation current modulated between a peak current and a bottom current, to said active layer region;

a phase adjustment region driving means which applies a first compensation current to said phase adjustment region when said bias current is input to said active layer region, and applies a second compensation current to said phase adjustment region when said multipulse modulation current is input to said active layer region; and

an operation unit which calculates an average value of said multipulse modulation currents input to said active layer region, calculates a difference between said bias current and said average value of the multipulse modulation currents, input to said active layer region, and calculates said first and second

compensation currents applied to said phase adjustment region by said phase adjustment region driving means, based on said difference.

10. The light source apparatus according to claim 9, wherein said second harmonic generation device is quasi-phase matched with said semiconductor laser.